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ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/923,557	KATO ET AL.
	Examiner	Art Unit
	Carolyn F. Fleary	2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 01 July 2005.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4)  Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) 31-51 is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-30 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed March 11, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Objections***

1. Claims 1-7 and 15 are objected to because of minor informalities

In regards to claim 1, In line 17–18, the article "the" should be inserted between "one of" (line 17) and "user terminal devices" (line 18) to conform with "one of the user terminal devices" initially recited in line 15.

Claims 4- 7 are also objected for the same reasons as recited for claim 1b. above. Claim 4 (line 4), claim 5(line 6-7) and claim 7 (line 6-7) should also be modified accordingly.

Claims 2, and 4 (line 2) , claim 5 ( line 5) and claim 15 (line 7-8 & 17) recite "said user terminal devices". Examiner suggest modifying claim as follows " said plurality of user terminal devices" to improve clarity of the claims.

In regards to claim 15 the article "a" should be inserted between "the status of" and "user"

***Claim Rejections - 35 USC § 112***

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2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Subject matter in claim 12 pertaining to a control of an interuser distance based on a "designated interuser distance input" and "designated interuser distance" is not disclosed in any form within Applicants specification and thus is not enabled.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1,3,5, 7,9-12, 15, 19-21, 23, and 24 are** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said terminal devices" in line 8, "the status of a user" in line 8, "the display of user status" in line 10-11, "the other user terminal devices" in line 11, "the pictorial image of a user image" in line 13, "the other user terminal device" in line 14, "the interuser distance" in line 17, "the display of the

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pictorial image " in lines 19-20, "said one of user terminal devices" in line 21. There is insufficient antecedent basis for these limitations in the claim.

a. In regards to claim 3, Claim 3 recites the limitation "the physical distance" in line 2. There is insufficient antecedent basis for the limitation in the claim.

b. In regards to claim 5, Claim 5 recites "the clarity of pictorial image" in line 8. There is insufficient antecedent basis for this limitation in the claim.

c. In regards to claim 7, Claim 7 recites the limitations "the image process" in line 2,7, "the user pictorial image" in line 3, "the pictorial image of the other user" in line 6-7

d. Regarding claim 9 and 23, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

e. Regarding claim 10, terms "higher" and "greater" in claim 9 are relative terms which render the claim indefinite. The term terms "higher" and "greater" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrases "the intensity of said filtering process" in line 2 and "said interuser distance" in line 3 is rendered indefinite by the use of the terms "higher" and "greater" respectively.

f. Regarding claim 11, the word "means" is preceded by the word(s) ""user status recognition", "terminal operating status recognition" and "image recognition" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the

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element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 11 recites the limitations "the status of input" in line 4, "the operating status" in line 6, "the user status" in line 11, "the result of each recognition" in e line 13. There is insufficient antecedent basis for these limitations in the claim.

g. Regarding claim 12, the word "means" is preceded by the word(s) "designated interuser distance input" and "control" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 12 recites the limitation "the user operation" in line 4-5. There is insufficient antecedent basis"for this limitation in the claim.

In regards to claim 15, Claim 15 recites the limitations "the display of a distributed system" in lines 1-2, "the status of user" in line 9, "the user status" in line 9, " the other user terminal device" in lines 9-10 and 16-17, "the interuser distance" in line 12, " said one of user terminal devices" in line 13 & 18. "the pictorial image" in line 14, "the display of the pictorial image" in line 19. There are insufficient antecedent basis for this limitation in the claim.

h. In regards to claim 19, Claim 19 recites "the clarity of pictorial image" in line 9-10. There is insufficient antecedent basis for this limitation in the claim.

i. In regards to claim 20, Regarding claim 20, terms "smaller" in line 3, and "higher in line 6" is a relative term which renders the claim indefinite. The term

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terms "smaller" and "higher" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrase "interuser distance" in line 3 and "clarity of pictorial image" is rendered indefinite by the use of the term "smaller" and "higher" respectively.

j. In regards to claim 21, Claim 21 recites "image process" in line 3. There is insufficient antecedent basis for this limitation in the claim.

k. Regarding claim 24, terms "higher" and "greater" in lines 3-4 are relative terms which render the claim indefinite. The term terms "higher" and "greater" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrases "the intensity of said filtering process" in line 3 and " said interuser distance" in line 4 is rendered indefinite by the use of the terms "higher" and "greater" respectively.

Applicants Claims are replete with 35 USC 112 problems that cause the invention, as claimed to be indefinite and unclear. Examiners rejections regarding the issues cited above are not intended to be an exhaustive list and thus there may be other problems within Applicants claims. Examiner suggests Applicant thoroughly review and amend claims in order eliminate any 35 USC 112 problems. Appropriate correction is required.

In order to expedite prosecution, Examiner has examined application as best as possible in light of 112, 2<sup>nd</sup> issues disclosed above.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1, 7, 13, 15, 18, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 6567844) in view of Matsui et al. (US 6,738,807) in view of Fernandez et al. (US 6,415,188).**

In regards to claim 1 Fukasawa discloses a distributed System provided with a plurality of user terminal devices (e.g. user computers 901-902) having image-taking (907-908) means display (e.g. monitor 909-910) means and a server device (912) connected with said plurality of devices through communication lines,

- user status recognition means for recognizing the status of a user in use of said terminal devices per user terminal device (col. 11 ll. 28-30)
- control means for controlling the display of a user on the other user terminal devices for said displaying means per user terminal device (col. 11 ll. 18-22)
- when the pictorial image of a user image-taken by image-taking (e.g. camera) means (col. 10 ll. 32-33) of the other user terminal device is displayed on one of the

user terminal devices among each of said user terminal devices (e.g. MultiViewer selection allows a user to see all participants/attendees. See col. 13 II. 56-65), said control means works out the interuser distance between said one of user terminal devices and said other terminal device (e.g. an a distance is determined when a user 903 request the image and display images of other users 901-902 as shown in fig. 9 and described in col. 11 II. 29-30), and controls the display of the pictorial image of the user on said other user terminal device for said displaying means of said one of user terminal devices in accordance with and interuser distance thus worked out (e.g. col. 11 II. 20-22).

Fukasawa is silent on said controlling the display of a user comprise controlling the display of a user status.

Matsui et al. discloses a distributed System provided with a plurality of user terminal devices (30), display (e.g. screen col. 7 II. 5-7) means and a server device (10) connected with said plurality of devices(30) through communication lines(N),

- user status recognition means (40) for recognizing the status of a user in use of said terminal devices per user terminal device (col. 5 II. 40-44, col. 6 II. 7-9)
- control means(20) for controlling the display of a user status (e.g. displaying a state of an object) on the other user terminal devices(30) for said displaying means (e.g. screen) per user terminal device (col. 6 II. 35-57, col. 7 II. 5-7, col. 7 II. 34-62 e.g. the status of an object which has changed is reflected in each of the client)
- when the pictorial image of a user image (e.g. avatar ) is displayed on one of the user terminal devices (30) among each of said user terminal devices (30 ) said control means controls a display of a pictorial image of the user (e.g. avatar, col. 1 II. 54-56, col. 2 II. 61-63) on said other user terminal device (30) for said displaying means of said one of user terminal devices (col. 7 II. 34-62).

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While Matsui et al. is silent on image-taking means *per se*, Matsui et al. does discloses a pictorial image (e.g. avatar) displayed on displays of terminal devices. It is known in the art image-taking means such as a camera may take an image and create pictorial image (avatar, animation), as shown by Fernandez et al. below:

Fernandez et al. discloses (col. 2 ll. 16-27) a video conferencing system that captures an image of a user using a camera (42) and forms a pictorial image (38/36) of a user (icon, avatar) for display on a display device (32).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Fukasawa by having controlling the display of a user status, as taught by Matsui in view of Fernandez in order to in order to accurately reflect and easily identify a changed state of an object (e.g. users of Fukasawa), in a plurality of client computers, in a virtual space/environment (col. 2 ll. 40-46, col. 3 ll. 10-15, 26-31,44-49).

In regards to claim 7, Fukasawa discloses a distributed system according to Claim 1, wherein said control means executes the image process (col. 12 ll. 26-col. 13 ll. ll. 5) for the user pictorial image of said other user terminal device corresponding to said interuser distance, and displays on displaying means of said one of user terminal devices the pictorial image of the other user after the execution of said image process (fig. 9-903, e.g. determine whether or not to display image of user on a display)

In regards to claim 13, Fukasawa discloses a distributed system according to claim 1, wherein said user status recognition means is provided for said user terminal device or said server device (col. 11 ll. 16-30).

In regards to claim 14, Fukasawa discloses a distributed system according to Claim 1, wherein said control means is provided either for said user terminal (e.g. provided for user terminal device to control display of image col. 11 ll. 13-30) or said server device.

In regards to claim 15, Claim 15 is rejected for the same reasons as that noted for the rejection of claim 1 above over Fukasawa, in view of Matsui et al. in view of Fernandez et al..

In regards to claim 18, Fukasawa rejects Claim 18 for the same reasons as that noted for the rejection of claim 4 above.

In regards to claim 29, Claim 29 is rejected over Fukasawa, in view of Matsui et al. in view of Fernandez et al. for the same reasons as that noted for the rejection of claim 1 and 15 above. In addition, Fukasawa discloses a storage medium (e.g. main storage) having a program (e.g. software, scripts, programs) readable by a computer (e.g. computer terminals, servers) for performing the steps of claims 1 and 15 (Additionally, see col. 3, ll. 66 – col. 4 ll. 27, col. 5 ll. 1-35, col. 10 ll. 15-28)

**7. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 6567844) in view of Matsui et al. (US 6,738,807) in view of Fernandez et al. (US 6,415,188) as applied to claim 1 further in view of Tachi (US 6,045,229)**

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In regards to claim 4 Fukasawa in view of Matsui et al. in view of Fernandez et al. discloses a distributed system according to Claim 1, wherein each of said user terminal devices is set within a virtual space (e.g. Fukasawa discloses a virtual space as a CollabField which is a shared virtual space used by user doe collaborate col. I. 5 II. 36-60, Matsui discloses virtual space col. 6 II. 7-9., Fernandez discloses virtual space col. 2 II. 29-31).,

Fukasawa in view of Matsui et al. in view of Fernandez et al. is silent on said interuser distance between said one of user terminal devices and said other user terminal device is a distance in terms of said virtual space.

Tachi discloses interuser distance between said one of user terminal devices and said other user terminal device is a distance in terms of said virtual space (col. 2 II. 38-42, col. 3 II. 67-col. 4 II., 1-5, col. 4 II.20-29).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Fukasawa in view of Matsui et al. in view of Fernandez et al. by having interuser distance between said one of user terminal devices and said other user terminal device is a distance in terms of said virtual space., as taught by Tachi for/in order to correctly represent cover relation to a user in augmented reality (see col. 3 II. 25-29)

**8. Claims 1, 5 –10, 12-15,19-24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al. (US 6,380,968) in view of Matsui et al. (US 6,738,807) in view of Fernandez et al. (US 6,415,188).**

In regards to claim 1 Alexander discloses a distributed System (100) provided with a plurality of user terminal devices (102,104, col. 4 II. 10-15) having image-taking (112,132) means display (118,138 means and a server device (110) connected with said plurality of devices through communication lines (106).

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- user status recognition means for recognizing the status of a user (202) in use of said terminal devices per user terminal device (e.g. 102 recognizes a video of a user in another terminal 104, col. 6 II. 35-43)
- control means for controlling the display of a user ( e.g. control unit – 200 controls display of an image of a user) on the other user terminal devices for said displaying means per user terminal device
- when the pictorial image of a user image (e.g. user of device 102 ) taken by image-taking means of the other user terminal device (e.g. device 104) is displayed on one of the user terminal devices among each of said user terminal devices (e.g. user of device 102 and all other devices disclosed in col. 4 II. 10-15), said control (200) means works out the interuser distance (e.g. focal length or distance, col. 3 II. 45-51, col. 5 II. 50-56) between said one of user terminal devices (e.g. 102) and said other terminal device (104), and controls the display of the pictorial image of the user on said other user terminal device (e.g. user of device 102 request to zoom in/out on a image of user of device 104, col. 10 II. 10-16, c, 11 II. 4-8, col. 11 II. 50-63) for said displaying means of said one of user terminal devices in accordance with and interuser distance thus worked out (e.g. focal length is adjusted accordingly).

Alexander et al. is silent on said controlling the display of a user comprise controlling the display of a user status.

Matsui et al. discloses a distributed System provided with a plurality of user terminal devices (30), display (e.g. screen col. 7 II. 5-7) means and a server device (10) connected with said plurality of devices(30) through communication lines(N),

- user status recognition means (40) for recognizing the status of a user in use of said terminal devices per user terminal device (col. 5 II. 40-44, col. 6 II. 7-9

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- control means(20) for controlling the display of a user status (e.g. displaying a state of an object) on the other user terminal devices(30) for said displaying means (e.g. screen) per user terminal device (col. 6 ll. 35-57, col. 7 ll. 5-7, col. 7 ll. 34-62 e.g. the status of an object which has changed is reflected in each of the client)
- when the pictorial image of a user image (e.g. avatar ) is displayed on one of the user terminal devices (30) among each of said user terminal devices (30 ) said control means controls a display of a pictorial image of the user (e.g. avatar, col. 1 ll. 54-56, col. 2 ll. 61-63) on said other user terminal device (30) for said displaying means of said one of user terminal devices (col. 7 ll. 34-62).

While Matsui et al. is silent on image-taking means per se, Matsui et al. does discloses a pictorial image (e.g. avatar) displayed on displays of terminal devices. It is known in the art image-taking means such as a camera may take an image and create pictorial image (avatar, animation) , as shown by Fernandez et al. below:

Fernandez et al. discloses (col. 2 ll. 16-27) a video conferencing system that captures an image of a user using a camera (42) and forms a pictorial image (38/36) of a user (icon, avatar) for display on a display device (32) .

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Alexander by having controlling the display of a user status, as taught by Matsui in view of Fernandez in order to in order to accurately reflect and easily identify a changed state of an object (e.g. users of Alexander), in a plurality of client computers, in a virtual space/environment (col. 2 ll. 40-46, col. 3 ll. 10-15, 26-31,44-49).

In regards to claim 6, Alexander discloses a distributed system according to Claim 5 wherein said interuser distance is worked out to be smaller (e.g. decreasing of a focal length) as the

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clarity of pictorial image of the user image taken by image-taking means of said one of user terminal devices of said user becomes higher (e.g. zooming in closer on an image, col. 11 ll. 50-63).

In regards to claim 7, Alexander discloses a distributed system according to Claim 1, wherein said control means

- executes the image process for the user pictorial image of said other user terminal device corresponding to said interuser distance, and displays on displaying means of said one of user terminal devices the pictorial image of the other user after the execution of said image process (e.g. user-102 request zoom in or zoom out of an image and view results on a display (col. 11 ll. 50-63, col. 12 ll. 47-54, also see fig. 5 -6)

In regards to claim 8, Alexander discloses a distributed system according to claim 7, wherein said image process is a filtering process having an intensity corresponding to said inter user distance (e.g. change in display of a image being viewed by a remote user -102, by issuing a command, for example zooming in/out, col. 11 ll. 50-63).

In regards to claim 9, Examiner has rejected the claimed subject matter as indefinite under 35 U.S.C 112 above. Examiner has interpreted the claims as best as possible. As such, Alexander discloses a distributed system according to claim 8, wherein said filtering process comprises: compresses/format video signals in accordance compression/decompression scheme, which alters the presentation of a video image (col. 6 ll.28-35), analyses of image pixels to measure color brightness, texture and hue (col. 7 ll. 64-col. 8 ll. 11).

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In regards to claim 10, Alexander discloses a distributed system according to claim 8, wherein the intensity of said filtering process becomes higher (e.g. zooming out causes more of image to be seen on a remote display col. 11 ll. 55-63) as said interuser distance becomes greater (e.g. increase focal length ).

In regards to claim 12, Examiner has rejected the claimed subject of claim 12 matter as under 35 USC 112, 1<sup>st</sup> as not being enabled by Applicants specification. Examiner has interpreted the claims as best as possible and in order to expedite prosecution has provided the following rejection of the claimed subject matter. Alexander discloses a distributed system according to Claim 1, further comprising a user providing a designated interuser distance input (e.g. zoom or panning %, col. 11 ll. 55-63), wherein a control means, controls said interuser distance (e.g. focal length) by a designated inter user distance (e.g. col. 6 ll. 62- col. 7 ll. 8, col. 8 ll. 39-43, col. 10 ll. 66-20)

In regards to claim 13, Alexander discloses a distributed system according to claim 1, wherein said user status recognition means is provided for said user terminal device or said server device (e.g. Alexander provides for user status recognition means of said user terminal device. User of terminal-102 recognizes a video of a user in another terminal-104, col. 6 ll. 35-43)

In regards to claim 14, Alexander discloses a distributed system according to Claim 1, wherein said control (e.g. control unit - 200 controls display of an image of a user) means is provided either for said user terminal or said server device (e.g. 102 recognizes a video of a user in another terminal 104, col. 6 ll. 35-43).

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In regards to claim 15, Claim 15 Alexander is rejected for the same reasons as that noted for the rejection of claim 1 above.

In regards to claim 19, Claim 19 Alexander is rejected for the same reasons as that noted for the rejection of claim 5 above.

In regards to claim 20, Claim 20 Alexander is rejected for the same reasons as that noted for the rejection of claim 6 above.

In regards to claim 21, Claim 21 Alexander is rejected for the same reasons as that noted for the rejection of claim 7 above.

In regards to claim 22, Claim 22 Alexander is rejected for the same reasons as that noted for the rejection of claim 8 above.

In regards to claim 23, Claim 23 Alexander is rejected for the same reasons as that noted for the rejection of claim 9 above.

In regards to claim 24, Claim 24 Alexander is rejected for the same reasons as that noted for the rejection of claim 10 above.

In regards to claim 26, Claim 26 Alexander is rejected for the same reasons as that noted for the rejection of claim 12 above.

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In regards to claim 27, Claim 27 Alexander is rejected for the same reasons as that noted for the rejection of claim 13 above.

In regards to claim 28, Claim 28 Alexander is rejected for the same reasons as that noted for the rejection of claim 14 above.

In regards to claim 29, Claim 29 is rejected over Alexander for the same reasons as that noted for the rejection of claim 1 and 15 above. In addition, Alexander discloses a storage medium having a program readable by a computer for performing the steps of claims 1 and 15 (See col. 12 -col. 14)

9. **Claims 2, 3, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 6567844) in view of Matsui et al. (US 6,738,807) in view of Fernandez et al. (US 6,415,188) as applied to claim 1 further in view of Flohr et al. (US 5,534,914)**

In regards to claim 2, Fukasawa in view of Matsui et al. in view of Fernandez et al. discloses a distributed system according to claim 1 wherein:

- said user terminal is within an organization having a place of duty (e.g. "logical coordinative work" which servers a group of people who work together, see abs II. 9-11)
- interuser distance between one of said user terminal devices and said other user terminal device is the distance in terms of organization (e.g. an a distance is determined when a user 903 request the image and display images of other users 901-902 as shown in fig. 9 and described in col. 11 II. 29-30).

Fukasawa in view of Matsui et al. in view of Fernandez et al. is silent on:

- said organization having plural places of duty, and

Flohr discloses distributed system (e.g. a distributed video conferencing system within an organization which is divided into divisions as shown in fig. 8) wherein

- each of said user terminal devices ( 101 & 111) is within in an organization (complete local area network of fig. 8) having plural places of duty (e.g. different work groups within a LAN, each work group on a separate floor, col. 12 II. 49-65), and
- interuser distance between one of said user terminal devices(101 ) and said other user terminal device (111) is the distance in terms of organization (e.g. components – 101-110 determine a distance and allow display of images of one user on another users device; See col. 13 II. 1-20; col. 14 II. 66-col. 15 II. 17)

All of the steps above are performed in order to enable the user terminals, such as those in the system of Fukasawa in view of Matsui et al. in view of Fernandez et al. to enter a distributed video conference system with any other user terminal which are all connected within a common group and within differing locations (see Flohr col. 5 II. 6-10, col.5 II. 14-22)

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Fukasawa in view of Matsui et al. in view of Fernandez et al. by having organization having plural places of duty, as taught by Flohr in order to enable the user terminals of Fukasawa et al. to enter a distributed video conference system with any other user terminal which are all connected within a common group and within differing locations (see col. 5 II. 6-10, col.5 II. 14-22).

In regards to claim 3, Fukasawa in view of Matsui et al. in view of Fernandez et al. discloses a distributed system according to Claim 1, works out an interuser distance.

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Fukasawa in view of Matsui et al. in view of Fernandez et al. is silent on said interuser distance is the physical distance between said one of user terminal devices and said other user terminal device.

Flohr discloses using a physical distance (e.g. using the location of a group of users on separate LANS and sending image of each users to all other users in a video conference, See col. 13 ll. 1-20, col. 14 ll. 66-col. 15 ll. 17).

In regards to claim 16, Claim 16 is rejected under Fukasawa in view of Flohr for the same reasons applied under the rejection of claim 2 above.

In regards to claim 17, Claim 17 is rejected under Fukasawa in view of Flohr for the same reasons applied under the rejection of claim 3 above.

**10. Claims 11, 25, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasawa (US 6567844) in view of Matsui et al. (US 6,738,807) in view of Fernandez et al. (US 6,415,188) in view of Stimmel (US 6,678,719).**

In regards to claim 11, Fukasawa in view of Matsui et al. in view of Fernandez et al. discloses a distributed system according to claim 1 user status recognition means comprises

- user status recognition means comprises terminal operating status recognition means for recognizing the operating status of each of said user terminal devices (See Fukasawa col. 11 ll. 15-31)

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- image recognition means for recognizing the pictorial image of the user image-taken by image-taking means of each of said user terminal devices (See Fukasawa col. 10 II. 24-33, col. 11 II. 15-31)
- said control means changes said interuser distance in accordance with the user status of said one of user terminal devices by at least one combinatory or more of the status result of each recognition given by said input status recognition means, said terminal operation status recognition means, and said image recognitions means (See Fukasawa e.g. combination of at user status recognition and image recognition)

Fukasawa in view of Matsui et al. in view of Fernandez et al. is silent on said user status recognition means comprises an:

- Input recognition means for recognizing the status of a user in use of said terminal devices per user terminal device

Stimmel discloses a distributed system according to claim 1 comprising

- Input status recognition means for recognizing the status of a user in use of said terminal devices per user terminal device ( col. 3 II. 27-38 )
- wherein said status recognition means comprises input status recognition means for recognizing the status of input from each user of said user terminal devices (fig. 2-3)
- terminal operating status recognition means for recognizing the operating status of each of said user terminal devices ( col. 3 II. 27-38 )
- image recognition means for recognizing the pictorial image of the user image-taken by image-taking means of each of said user terminal devices (e.g. status indicator of video-conferencing as disclosed in fig. 3A, indicates that a user is being captured by image taken means of a video conferencing system, col. 4 II. 3-13)

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- said control means changes said interuser distance in accordance with the user status of said one of user terminal devices by at least one combinatory or more of the status result of each recognition given by said input status recognition means, said terminal operation status recognition means, and said image recognitions means (e.g. the statuses of the each user a modified to reflect a current state of a user as disclosed in col. 3 II. 30-col. 4 II. 16)

All of the above are performed in order for a user participating in a conference (video) to gain an understanding of the status of other users from a display (col. 3 II. 41-43, col. 4 II. 14-15, also see abstract).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Fukasawa in view of Matsui et al. in view of Fernandez et al. to include input recognition means for recognizing the status of a user in use of said terminal devices per user terminal device, as taught by Stimmel for In order to user participating in a distributed conferencing environment, such as that taught by Fukasawa, to gain an understanding of the status of other users from a display (col. 3 II. 41-43, col. 4 II. 14-15, also see abstract).

In regards to claim 25, Claim 25 is rejected over Fukasawa in view of Matsui et al. in view of Fernandez et al. in view of Stimmel for the same reasons as that noted for the rejection of claim 11 above.

In regards to claim 30, Claim 30 is rejected over Fukasawa in view of Matsui et al. in view of Fernandez et al. in view of Stimmel for the same reasons as that noted for the rejection of claim 11 and 25 above. In addition, Fukasawa discloses a storage medium (e.g. main storage) having a program (e.g. software, scripts, programs)readable by a computer (e.g. computer terminals, servers) for performing the steps of claims 1 and 25 (Additionally, see

col. 3, ll. 66 – col. 4 ll. 27, col. 5 ll. 1-35, col. 10 ll. 15-28). Stimmel discloses a storage medium having a program (e.g. program modules, plug-ins) executable on a computer (e.g. user computer) for performing steps for which Fukasawa is silent (refer to claim 11 and 25 above) above (See. Stimmel col. 3 ll. 1-6, col. 3 ll. 27-37).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### **Multi-Party Conferencing Systems**

- Manabe; Ai et al. (US 6584494 B1) Communication support method and communication support system
- Ludwig; Lester F. et al.:
  1. US 5 583806 B2 Videoconferencing hardware.
  2. US 6343314 B1 Remote participant hold and disconnect during videoconferencing
  3. US 6237025 B1 Multimedia collaboration system
  4. US 5896500 A System for call request which results in first and second call handle defining call state consisting of active or hold for its respective AV device
  5. US 5884039 A System for providing a directory of AV devices and capabilities and call processing such that each participant participates to the extent of capabilities available

6. US 5758079 A      Call control in video conferencing allowing acceptance and identification of participants in a new incoming call during an active teleconference
- Lee; Sang-Jin (US 6172703 B1)      Video conference system and control method thereof
  - Boyer; David Gray      US 5896128 A)      System and method for associating multimedia objects for use in a video conferencing system
  - Gregory, III; Earl A. et al.      (US 5793415 A) Videoconferencing and multimedia system )
  - Lukacs; Michael Edward      (US 5737011 A)      Infinitely expandable real-time video conferencing system
  - Seligmann; Doree      US 6330022 B1      Digital processing apparatus and method to support video conferencing in variable contexts

**Virtual Environments (Office, Network, Spaces)**

- Benman, Jr.; William J.      (US 5966130 A )      Integrated virtual networks
- Kawamura; Katsumi et al.      US 6404430 B1      Virtual space information processor
- Imai; Shigeaki et al. US 6389153 B1      Distance information generator and display device using generated distance information
- Kozuka; Hiroshi      US 6166727 A      Virtual three dimensional space sharing system for a wide-area network environment
- McNerney; Michelle et al.      US 5999208 A      System for implementing multiple simultaneous meetings in a virtual reality mixed media meeting room

**Image Processing:**

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- Yonezawa; Hiroki et al. (US 6741276 B1) Camera control system
- Nomura (US 6795581) Continuous Gradation Compression Apparatus And Method, Continuous Gradation Expansion Apparatus And Method, Data Processing Apparatus And Electron Device, And Memory Medium Storing Programs For Executing Said Methods. (Relevant to claims 7-9)
- Duton et al. (US 6,512,541) Increasing image field of view and frame rate in an imaging apparatus (relevant to claims 1-9)
- Suga et al. (US 6,38,0972) Video system including a camera controlled by a control apparatus through communication means
- Suga et al. (US 6,313,875) Image pickup control apparatus and method wherein other control apparatuses are inhibited from controlling a camera
- Cortjens; Leo M. et al. US 5598209 Method for automatically adjusting a video conferencing system camera
- Cortjens; Leo M. et al. US 5583565 A Method for automatically adjusting the pan and tilt of a video conferencing system camera
- Toyama; Kentaro et al. US 6806898 B1 System and method for automatically adjusting gaze and head orientation for video conferencing
- Kuroda; Ken US 6804020 B1 Image processing using received processing conditions
- Jones; John E. et al. US 6661910 B2 Network for transporting and processing images in real time
- Andersson; Russell L. et al. US 5500671 A Video conference system and method of providing parallax correction and a sense of presence
- Perholtz; Ronald J. et al. (US 5,566,339) System and method for monitoring computer environment and operation.

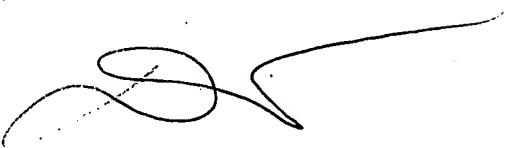
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn F. Fleary whose telephone number is (571) 572-7218. The examiner can normally be reached on 8:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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